5.14 Hazardous Materials

Hazardous materials can be encountered during the construction and operation of public projects. Examples of common hazardous materials include asbestos, lead-based paint, and total petroleum hydrocarbons[1], also known as TPH. Without proper handling, removal, and containment, these materials can pose dangers to human health and the environment. Identifying known and potential contamination prior to construction is important because it can greatly reduce the possibility of exposure to people and the environment.

Hazardous materials can be encountered on project sites.

How did we identify hazardous material sites within the Renton to Bellevue project area?

The project team reviewed historical land uses, regulatory agency database lists (Environmental Data Resources, Inc. [EDR], 2004), and Washington State Department of Ecology (Ecology) site files. The project team also conducted a windshield survey of properties within the project area.

Please refer to the Renton to Bellevue Project Hazardous Materials Discipline Report in Appendix Z (on CD) for a complete discussion of the hazardous material analysis.

What contaminated sites are located in the project area?

Contaminated materials may be encountered on, or down-gradient from, several properties located along the proposed right of way for the Renton to Bellevue Project. We examined twenty potentially contaminated sites in more detail (Exhibit 5.14-1), including several "substantially contaminated"[2] properties, described in the following paragraphs.

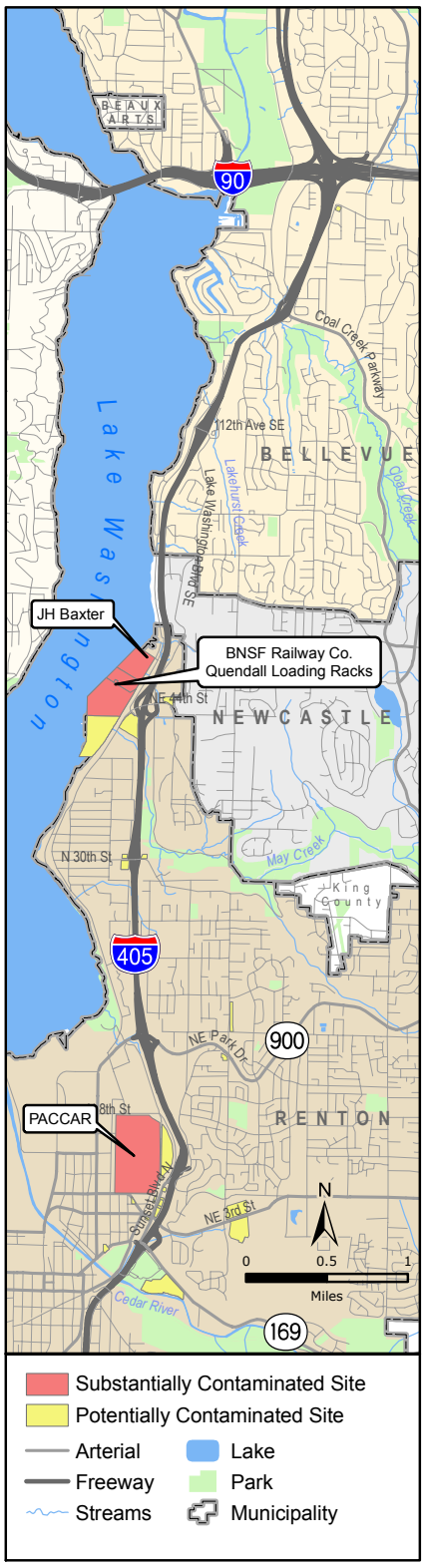
What are "reasonably predictable" properties?

"Reasonably predictable" properties refer to sites with recognized environmental conditions based on existing data, or they can be predicted to have those conditions based on site observations, previous experience, or by using best professional judgment. Common examples of reasonably predictable sites might include a dry cleaning business or a former gas station. These properties are typically small; contaminants are localized and are relatively non-toxic; and abatement or remediation activities are routine.

[1] Total petroleum hydrocarbons (TPH) is a term used to describe a large family of several hundred chemical compounds that originally come from crude oil.

[2] Substantially contaminated sites are sites that have potential for substantial contamination of soil, groundwater, surface water, and/or sediment; contain contaminants that are persistent or expensive to manage; and lack information on predicted remedial costs.

Exhibit 5.14-1: Potentially contaminated sites



JH Baxter & Co. Inc. – This site is a former wood treatment plant with confirmed groundwater, sediment, and soil contamination (phenolic compounds, petroleum products, polycyclic aromatic hydrocarbons [PAHs], and non-halogenated substances). Cleanup is ongoing. This site, located adjacent to the proposed project right of way near the NE 44th Street interchange, was reviewed in greater detail because of the presence of confirmed soil and groundwater contamination in relation to right of way.

BNSF Railway Quendall Loading Racks – This property is a former tar refinery, fuel storage, and a log sort yard. The site is currently awaiting completion of a Risk Assessment and Feasibility Study (Agreed Order, 1993). This site, located within the project right of way near the NE 44th Street interchange, was further reviewed based on the suspected presence of soil contamination in relation to right of way.

Pacific Car and Foundry (PACCAR) – This Superfund site in Renton is currently undergoing long-term groundwater monitoring. All cleanup activities were completed at the site in 1996 under a Consent Decree (Ecology, 1988) between Washington State and PACCAR. Soil contaminated with low levels of PAHs, polycyclic chlorinated biphenyls (PCBs), petroleum hydrocarbons, and metals remains onsite. The area is capped by at least 12 inches of structural fill material and, in most areas, pavement. This site is located within the planned right of way at N 8th Street.

The remaining seventeen sites are considered to be "reasonably predictable" properties with respect to presenting a potential for the presence of hazardous materials.

Will the project affect any hazardous materials sites?

Despite measures to manage risks associated with hazardous materials, unknown contaminants can be encountered. These materials can result in short-term contamination to the environment before avoidance actions can be taken.

Construction associated with the Renton to Bellevue Project can encounter non-identified substances, underground storage tanks (USTs), or contaminated media (including asbestos-containing materials [ACM] and lead-based paint [LBP]).

The Renton to Bellevue Project will improve congestion, traffic flow, and safety compared to the No Build Alternative. This

improvement in traffic operations will reduce the risk of accidents, including those involving hazardous substances, and decrease the risk of harmful substances entering soil and water resources within the project area.

What measures are proposed to avoid or minimize effects from hazardous materials during construction?

Known or Suspected Contamination within the Project Right of Way

- WSDOT will conduct preliminary site investigations before acquiring right of way property and before beginning construction activities where sites of concern have been identified.
- If ongoing remedial activity is affected by this project, WSDOT will coordinate with the respective stakeholders.
- WSDOT will prepare a spill prevention control and countermeasure (SPCC) plan that provides specific guidance for managing contaminated media that may be encountered within the right of way.
- WSDOT may be responsible for the remediation and monitoring of contaminated properties that will be acquired for this project. In such cases, WSDOT will further evaluate the identified properties to assess their condition before acquisition or construction occurs.
- Prior to construction, WSDOT will have a thorough asbestos containing materials/lead-based paint (ACM/LBP) building survey completed by a certified building inspector on all property structures that will be acquired and/or demolished.
- If WSDOT acquires a portion or all of a property (building, structure) suspected of containing ACM/LBP, WSDOT will properly abate and dispose of any existing ACM and LBP contamination prior to construction activities. Depending on the concentration of lead in the demolition debris, some debris may need to be disposed of as dangerous waste, which will require Ecology to be notified.
- If WSDOT encounters an underground storage tank (UST) within the right of way, WSDOT will assume

cleanup liability for the appropriate decommissioning and removal of the UST.

- WSDOT will dispose of all construction waste material, such as concrete and other potentially harmful materials at approved sites.
- WSDOT may acquire the responsibility for cleanup of any soil or groundwater contamination encountered during construction within WSDOT right of way. Contamination will be evaluated relative to Model Toxics Control Act (MTCA) cleanup levels.
- WSDOT will meet all regulatory conditions imposed at contaminated properties (such as consent decree) associated with construction. These conditions can include ensuring that the site is properly contained after construction is completed so that contaminants do not migrate offsite and so that the health and safety of all on-site personnel are protected during work at the site.
- WSDOT will consider entering into a pre-purchaser's agreement for the purposes of indemnifying WSDOT against acquiring the responsibility for any long-term cleanup and monitoring costs.

Known or Suspected Contamination Outside of the Project Right of Way

- Contaminated groundwater originating from properties located up-gradient of the right of way could migrate to the project area. WSDOT generally will not incur liability for groundwater contamination that has migrated into the project footprint as long as the agency does not acquire the source of the contamination. However, WSDOT will manage the contaminated media in accordance with all applicable rules and regulations.

Unknown Contamination

- If WSDOT acquires a property that has unknown contamination, the agency could incur liability for any contamination discovered after acquisition, as well as liability for the removal of any stored materials remaining onsite at the time of the acquisition. WSDOT could be responsible for cleanup or disposal

of these unknown substances, for example, USTs and contaminated media (including ACM and LBP). If unknown contamination is discovered during construction, WSDOT will follow the SPCC plan as well as all appropriate regulations.